<u>REMARKS</u>

The application was filed on 19 April 2001 with sixteen claims. The Examiner examined the application and on 21 October 2004 issued a first Action. In the Examiner's Action, the Examiner rejected claims 1-7 and 10-16 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,405, 364 B1 entitled BUILDING TECHNIQUES IN A DEVELOPMENT ARCHITECTURE FRAMEWORK to Bowman-Amuah (Bowman-Amuah '364). The Examiner also rejected claims 8-9 under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah '364 in view of U.S. Patent No. 5,519,778 entitled METHOD FOR ENABLING USERS OF A CRYPTOSYSTEM TO GENERATE AND USE A PRIVATE PAIR KEY FOR ENCIPHERING COMMUNICATIONS BETWEEN THE USERS to Leighton et al. (Leighton '778).

Applicants respond. Applicants amend independent claims 1 and 7 and dependent claims 8 and 9. Applicants have not added new matter with the amendments to independent claims 1 and 7. Support for the security properties to include an audit subsystem, an integrity subsystem, and an information flow control subsystem in given in the original filed specification in Figures 3, 4, 5, and 7, and the respective descriptions on page 13, line 2 through page 14, line 20 and on page 15, line 19 through page 16, line 11. Support for ranking of threats to the security properties of the overall solution, as included in amended claims 8 and 9, is given in original claims 7, 8, and 9. Claims 1-16 are pending.

The Rejection Under 35 U.S.C. §103(a) over Bowman-Amuah '364

The Examiner rejected claims 1-7 and 10-16 under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah '364. The Examiner asserts that Bowman-Amuah '364 discloses a system and method for building systems in a development architecture framework wherein security is integrated into the solution. The Examiner admits that Bowman-Amuah '364 does not disclose creating a functional technology diagram, but does disclose documenting the process which performs the function of the functional

technology diagram. In response, Applicants have amended independent claims 1 and 7. The amendments have narrowed the claims to particularly point out and distinctly claim that the second system that identifies the security properties based on functions attributable to security subsystems wherein the security subsystems further comprise an audit subsystem process, an integrity subsystem process and an information flow control subsystem process. Applicants have further amended claims 8 and 9 to more distinctly claim that the ranked security threats are to the security properties of the overall solution.

Bowman-Amuah '364 teaches an integrated development framework for the creation of software that has security management. The most detail that Bowman-Amuah '364 provides for security management is presented at column 49, line 65 through column 51, line 13. Attorney for Applicants have read through these and other columns several times looking for an audit subsystem and process, an integrity subsystem and process, and an information control subsystem and process, all being integrated in a second system which determines the overall security properties, as claimed in amended independent claims 1 and 7. Respectfully, I could not find that the audit, the integrity, or the information flow control subsystems are integrated in the system of Bowman-Amuah '346. The security management system of Bowman-Amuah '364 deals mainly with preventing unauthorized access to the system, e.g., *intrusion detection, network assessment, platform security to minimize the opportunities for intruders ..., web-based access control, fraud services, mobile code security, e-mail, encryption, public key infrastructure, authentication system, and firewall.* Bowman-Amuah '364 briefly mentions the need for security audits for the development architecture framework at column 18, lines 60-63, but merely states that audits can be done by an external body specializing in security in the form of interviews, architecture and code reviews, and automated tool assessment. Nowhere, does Bowman-Amuah '364 talk about an integrated audit subsystem process, an integrated integrity subsystem process, and an integration information flow control subsystem process that is part and parcel of the system allocating security properties.

In view of the amendments above, Applicants respectfully request the Examiner to withdraw the rejection of claims 1–7 and 10-16 under 35 U.S.C. §103(a) by modification of Bowman-Amuah '364 because the reference does not teach or suggest the integration of auditing, managing integrity, and managing information flow control in determining the overall security properties of a solution.

The Rejection of claims 8-9 Under 35 U.S.C. §103(a) over Bowman-Amuah '364 in view of Leighton '778

The Examiner rejected claims 8-9 under 35 U.S.C. §103(a) under a combination of Bowman-Amuah '364 in view of Leighton '778. The Examiner applies Bowman-Amuah '364 as above and then applies Leighton '778 as a reference to rank the security levels and threats to the system. Applicants reiterate that Bowman-Amuah '364 does not teach or suggest that auditing the security properties, managing the integrity and/or the information flow control of a information technology system can be integrated into a security management system.

Leighton '778 applies a ranking system to users of a cryptosystem wherein communications are ciphered between ranked users of the system, i.e., one user may have a higher security clearance/level than another user. Leighton '778 ranks only those users for secret-key exchange wherein first, users can directly talk to one another and second the conversation between two users always takes place at the highest common level of security, see column 6, lines 44-47. Leighton '778 does not suggest applying a ranking of security threats to any other subsystems of a software development system, such as claimed by Applicants. Threats to management of audits, integrity, and information flow control are not mentioned by Leighton '778. Thus, with the Examiner's observation that Bowman-Amuah '364 does not rank security threats combined with the fact that Leighton '778 ranks only the security level of users on a cryptographic system, Applicants respectfully request the Examiner to reconsider the rejection of claims 8 and 9 under 35 U.S.C. §103(a) and allow the claims.
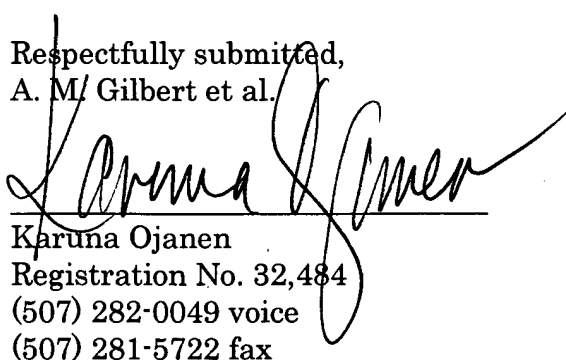
Conclusion

Applicants maintain that the security management proffered by Bowman-Amuah '364 does not teach nor suggest, nor can be easily modified to integrate the three process subsystems claimed in independent claims 1 and 7 of Applicants' invention. The combination of Bowman-Amuah '364 with Leighton '778, moreover, does not teach the three subsystems integrated into security wherein the risks to the auditing, the risks to the integrity, and the risks to the information flow control subsystems are ranked.

Attorney for Applicants thank the Examiner for her careful review of the specification, the figures, and the claims. Applicants have thus amended the specification to remove minor typographical mistakes, and have amended the claims to overcome the rejection under 35 U.S.C. §103(a) because Bowman-Amuah '364 does not teach an integrated security system having subsystems for auditing, managing integrity, and managing information flow control. Bowman-Amuah '364 and Leighton '778 combined further do not teach ranking threats to the security of those and other subsystems. Having reviewed the art submitted by the Examiner, Attorney for Applicants is confident of the patentability of the claimed invention herein and requests the Examiner to allow all claims. The Examiner is further invited to telephone the Attorney listed below if she thinks it would expedite the prosecution and the issuance of the patent.

Respectfully submitted,
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